Berlex Laboratories

Protocol 305602: A Multinational Multicenter, Randomized, Double-Blind, Placebo Controlled Study to Evaluate the Efficacy and Safety of Ad5FGF-4 in Patients with Stable Angina

TECHNICAL ABSTRACT

Date: Dec 19, 2001 Amended: April 10, 2002

Amended: November 20, 2002

Study phase:

2B/3

Investigational Product, dosage, and route of administration:

Ad5FGF-4, E1 deleted human adenovirus serotype 5 with an hFGF-4 insert driven by a CMV promoter. Placebo will consist of an identical-appearing vehicle. The two doses studied will be 1.0 X 109 viral particles (2.87x108 total particles) and 1.0 X 10¹⁰ viral particles (2.87X10⁹ total particles). Product will be administered via intra-coronary

injection as a single dose.

Indication

Stable angina.

Primary Study objectives

To evaluate the efficacy and safety of Ad5FGF-4.

Patient population

Patients with stable angina, Canadian Cardiovascular Society (CCS) Classes 2 to 4 who are symptomatic despite medication and who are not optimal candidates for revascularization (coronary artery bypass graft [CABG] or percutaneous transluminal coronary angioplasty

[PTCA]).

Study design

Randomized, parallel group, placebo controlled,

double-blind.

Interim analyses

After approximately 27%, and 50% of patients have completed 12 weeks of follow-up by independent

Data Safety Monitoring Board.

Concurrent control

Matching placebo.

Duration of observation

Up to 15 years, with clinic visits every year for 5

years.

Methodology

Baseline exercise treadmill testing. Intra-coronary administration of study product to patients with demonstrated angina limiting exercise capacity. Repeat exercise testing at week 4, week 12 and

month 6.

Number of study centers

· Up to 100

Total number of patients

450 patients receiving study product

(Up to 350 of these to be included in the UK)

Known potential adverse events

Adenoviral and growth factor related.

Plan for data analysis

Intention-to-treat analysis, last observation carried

forward.

Planned start and end of recruitment

Start of recruitment Q1 2002

End of recruitment Q3 2004

Manufacturer(s) of the investigational/reference product(s)

Berlex Biosciences, Richmond, California.